

REMARKS/ARGUMENTS

Claims 1 and 3-22 are pending in this application. By this Amendment, the abstract, specification and claims 1 and 3-20 are amended, claims 21 and 22 are added, and claim 2 is canceled without prejudice or disclaimer. Support for the claims can be found throughout the specification, including the original claims and the drawings. Withdrawal of the rejections in view of the above amendments and the following remarks is respectfully requested.

I. Allowable Subject Matter

The Examiner is thanked for the indication that claims 6, 7, 9-13 and 20 would be allowable if rewritten in independent form. However, for the reasons set forth below, claims 6, 7, 9-13 and 20 have not been rewritten in independent form at this time.

II. Rejection Under 35 U.S.C. §112

The Office Action rejects claim 14 under 35 U.S.C. §112, second paragraph, as allegedly indefinite. It is respectfully submitted that the amendments to claim 14 are responsive to the Examiner's comments, and that claim 14 meets the requirements of 35 U.S.C. §112, second paragraph. Accordingly, the rejection should be withdrawn.

III. Rejections Under 35 U.S.C. §102(b)

The Office Action rejects claims 1-3, 5 and 15-19 under 35 U.S.C. §102(b) over U.S. Patent No. 3,227,835 to Conrath. Claim 2 has been canceled. The rejection, in so far as it applies to the remaining claims, is respectfully traversed.

Independent claim 1 is directed to a washing machine that includes a sensor assembly that senses transient vibration of a tub of the washing machine. Independent claim 1 recites that the sensor assembly comprises a bracket coupled to an interior of a cabinet, and an arm that is rotatably coupled to the bracket, wherein one end of the arm is positioned a predetermined distance from the tub such that the arm is contacted by the tub and rotates when the tub experiences a transient vibration. Independent claim 1 also recites that the sensor assembly includes a sensor mounted on the arm, wherein the sensor senses the transient vibration and outputs a corresponding signal to the controller when the arm rotates. Conrath neither discloses nor suggests such features, or the claimed combination of features.

Conrath discloses a combination out of balance and safety spin switch, including a switch assembly 21 with input members 22 and 23 that move in response to gyration of a tub 12 and an opening and closing of a door 16 of a washing machine 10. The switch assembly 21 is mounted to an upper wall of the washing machine 10 by a frame 25 including a side wall 26 and top and bottom support plates 27 and 28. As the tub 12 gyrates, the rim 19 of the tub 12 pushes on a depending finger 41 of the input member 22. This causes the input member 22 to rotate and to push an actuator 33 against a plunger 32 of a switch 29 that controls power to the washing machine 10.

It appears the Examiner has drawn a comparison between the switch assembly 21 disclosed by Conrath and the sensor assembly recited in independent claim 1, and in particular, between the input members 22, 23 disclosed by Conrath and the sensor recited in independent

claim 1. However, the input members 22, 23 are simply bell crank shaped trip levers (see, for example, column 2, lines 60-61 of Conrath) that rotate when they are contacted by the rim 19 or the tub 12, or by the door 16, respectively. Thus, it is respectfully submitted that the input members 22, 23, which each rotate about a respective axis of rotation, are more appropriately compared to the arm recited in independent claim 1. If this more appropriate comparison is drawn, then Conrath neither discloses nor suggests any type of sensor mounted on one of the input members 22, 23 that senses a transient vibration of the tub 12, as the sensor recited in independent claim 1.

Accordingly, it is respectfully submitted that independent claim 1 is not anticipated by Conrath, and thus the rejection of independent claim 1 under 35 U.S.C. §102(b) over Conrath should be withdrawn. Dependent claims 3, 5 and 15-19 are allowable at least for the reasons set forth above with respect to independent claim 1, from which they depend, as well as for their added features.

The Office Action rejects claims 1, 2, 15-17 and 19 under 35 U.S.C. §102(b) over U.S. Patent No. 5,850,746 to Lee. Claim 2 has been canceled. The rejection, in so far as it applies to the remaining claims, is respectfully traversed.

The features of independent claim 1 are as set forth above. Lee neither discloses nor suggests such features, or the claimed combination of features.

Lee discloses as conventional art (referred to in the Office Action) a washing machine including inner and outer tubs 3 and 15 positioned in a body 16, and an unbalance sensing

switch 4a. If the inner tub 3 bumps against the outer tub 15, the outer tub 15 deflects a lever 26, causing switching points 24a and 25a to be isolated from one another and switch off power to the washing machine. Lee suffers deficiencies similar to those set forth above with respect to Conrath. More specifically, Lee neither discloses nor suggests any type of sensor mounted on the lever 26 (compared in the Office Action to the recited arm), as recited in independent claim 1.

Accordingly, it is respectfully submitted that independent claim 1 is not anticipated by Lee, and thus the rejection of independent claim 1 under 35 U.S.C. §102(b) over Lee should be withdrawn. Dependent claims 15-17 and 19 are allowable at least for the reasons set forth above with respect to independent claim 1, from which they depend, as well as for their added features.

IV. Rejections Under 35 U.S.C. §103(a)

The Office Action rejects claim 4 under 35 U.S.C. §103(a) over Conrath in view of Yamanashi, U.S. Publication No. 2003/0160141. The Office Action also rejects claim 8 under 35 U.S.C. §103(a) over Conrath in view of U.S. Patent No. 4,884,845 to Shmale et al. (hereinafter “Shmale”). These rejections are respectfully traversed.

Dependent claims 4 and 8 are allowable over Conrath at least for the reasons set forth above with respect to independent claim 1, from which they depend, as well as for their added features. Further, Yamanashi is merely cited as allegedly teaching the use of a bracket hook, and Shmale is merely cited as allegedly teaching the use of a washer. Thus, Yamanashi and Shmale each fails to overcome the deficiencies of Conrath. Accordingly, it is respectfully submitted that

dependent claims 4 and 8 are allowable over the respective applied combinations, and thus the rejections should be withdrawn.

V. Double Patenting Rejection

The Office Action provisionally rejects claims 1-18 under the judicially created doctrine of obviousness-type double patenting over claims 1-19 of co-pending Application Serial No. 10/772,459 (hereinafter “the ‘459 application”). Claim 2 has been canceled. The rejection, in so far as it applies to the remaining claims, is respectfully traversed.

MPEP 804 states:

“The doctrine of double patenting seeks to prevent the unjustified extension of patent exclusivity beyond the term of a patent.

...[T]he second [type of double patenting rejection] is the “nonstatutory-type” double patenting rejection based on a judicially created doctrine grounded in public and which is primarily intended to prevent prolongation of the patent term by prohibiting claims in a second patent not patentably distinguishing from claims in a first patent.”

The present application was filed in the U.S. on November 21, 2003 (claiming priority to a corresponding Korean application filed on November 28, 2002). The ‘459 application was filed in the U.S. on November 28, 2003 (claiming priority to a corresponding Korean application filed on November 28, 2002). The November 21, 2003 U.S. filing date of the present application pre-dates the November 28, 2003 U.S. filing date of the ‘459 application. Thus, the filing of the present application can in no way be used to extend patent exclusivity of the ‘459 patent, and any such terminal disclaimer as referred to in the Office Action would be ineffective, as there would be no term to disclaim. Accordingly, it is respectfully submitted that the

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provisional double patenting rejection of claims 1 and 3-18 of the present application over claims 1-19 of the '459 application is improper, and that the rejection should be withdrawn.

VI. New Claims 21-22

New claims 21-22 are added to the application. It is respectfully submitted that new claims 21-22 meet the requirements of 35 U.S.C. § 112, and are allowable at least for the reasons set forth above with respect to independent claim 1, from which they ultimately depend, as well as for their added features.

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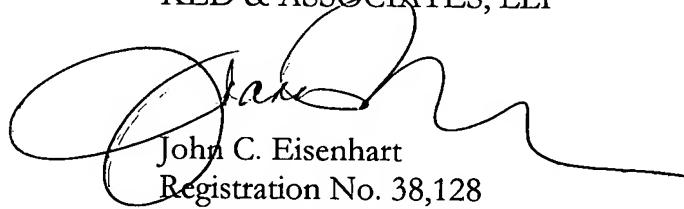
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V. Conclusion

In view of the foregoing amendments and remarks, it is respectfully submitted that the application is in condition for allowance. If the Examiner believes that any additional changes would place the application in better condition for allowance, the Examiner is invited to contact the undersigned, Joanna K. Mason, at the telephone number listed below.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this, concurrent and future replies, including extension of time fees, to Deposit Account 16-0607 and please credit any excess fees to such deposit account.

Respectfully submitted,
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